



# Turfgrass Conditioner

**Plant-Wise** Biostimulant Company, Louisville, Kentucky, a relatively new company formed in 1992, is marketing a novel product for the turfgrass professional that is designed to improve turf quality and vigor even under adverse conditions. Called 3D Concentrated Plant Growth Supplement, the product's formula incorporates space agricultural technology developed under NASA contract.

3D, says the company, is a scientifically balanced blend of fortified seaweed extracts, humic acid and plant nutrients designed to supply turf plants with extra "insurance" to handle stress-related problems and maximize their growth potential. The "3D" refers to the product's three principal conditioning characteristics: foliar enhancement, the main benefits of which are improved color and aesthetic quality, reduced stress and frost damage; physiological integrity, wherein the plant's biochemistry is improved by formulation components that initiate cell division, which helps the plant stimulate development of new leaves; and foundation fortification, promoted by components that help the plant generate new and deeper roots while retarding root senescence (loss of vigor).

Field tested by Dr. Dick Schmidt, professor of turf ecology, and his staff at Virginia Polytechnic Institute, Blacksburg, Virginia, 3D won a solid endorsement. Dr. Schmidt reported: "With the use of 3D, a balanced blend of biostimulant and iron, we have demonstrated that turf quality can be

enhanced by reducing the influence of drought, increasing root development under adverse conditions, and offsetting the infection of certain diseases and nematodes.

The 3D formulation was developed by Dr. Richard R. Dedolph, formerly a plant physiologist with Argonne National Laboratories and Western Regional Research Laboratories, who also worked under NASA contract as a project leader in research on plant cultural systems for space application. The 3D development benefitted from Dr. Dedolph's NASA-acquired expertise in research that explored the potential of plants as food sources and recycling agents in long duration spacecraft.



*The lush green and fairway turf at Pennsylvania's Butter Valley Golf Port is enhanced by 3D Concentrated Plant Growth Supplement.*